Amendment dated: November 26, 2004

Reply to OA of: July 29, 2004

## **Amendments to the Specification**

Page 8, replace paragraph 1, as follows:

The coating tool be used in a precise coating engineering described above is a possessing electricity, magnet, heat, force, etc. combinational field design to develop the field control function, the coating thickness range is 100Å ~ 100 [[î m]] <u>µm</u>. Electrical field is a direction current or an alternating current, magnetic field is >2500 gauss, the force field of coating tool is a contact force field, which can be a ordered micro-fluid force field, a porous micro-fluid force field, a tension force field, or a condensed pressure force field.

Page 8, delete the heading on line 9, and insert the following heading:

#### Preparation of aniline monomer and oligomer solution

Page 8, insert the following paragraph after paragraph 2, as follows:

The following comparative examples are not examples of the invention but are without the field effect control according to the present invention.

Page 8, delete the heading on line 22, and insert the following heading:

### Comparative Example 1

Page 8, replace the last paragraph (bridging pages 8 and 9), as follows:

This experimental example is that on the substrate surface without a plasma field treatment was coated a polyaniline film, which is no treatment with field control structure

Amendment dated: November 26, 2004

Reply to OA of: July 29, 2004

ordered, the— The above prepared aniline monomer and oligomer solution of experimental example 1 was coated onto a PET film surface, a wet film is about 1.5 [[i m]] µm, the solvent was evaporated automatically at the room temperature to form an aniline related film about 0.3 [[i m]] µm. Then, an available amount of oxidant solution was coated onto an aniline related film to proceed polymerization to produce the polyaniline film, finally, the polyaniline film was placed in an oven to be baked at 100°C for 10 min. By using a four-point probe measurement instrument equipment to measure the electrical conductivity of this polyaniline film the valve is about 2 x 10<sup>-2</sup> S/cm.

Page 9, delete the heading on line 12, and insert the following heading:

# Comparative Example 2

Page 9, replace paragraph 2, as follows:

This experimental example is that on the A substrate surface with a plasma field treatment was coated with a polyaniline film, which is no treatment with a field control structure ordered; a PET film was treated with 50 watts of microwave oxygen plasma for 5 min., and then the above prepared aniline monomer and oligomer solution of experimental example 1 was coated onto a PET film surface, a wet film is about 1.5 [[î m]] µm, the solvent was evaporated automatically at the room temperature to form an aniline related film about 0.3 [[î m]] µm. Then, an available amount of oxidant solution was coated onto an aniline related film to proceed polymerization to produce the polyaniline film, finally, the polyaniline film was placed in an oven to be baked at 100°C for 10 min. By using a four-point probe measurement instrument equipment to measure the electrical conductivity of this polyaniline film the value is about 7.5 S/cm.

Page 10, delete the heading on line 2 and insert the following heading:

Amendment dated: November 26, 2004

Reply to OA of: July 29, 2004

## Comparative Example 4

Page 10, replace paragraph 1, as follows:

This experimental example is that on the substrate surface without a plasma field treatment was coated a polyaniline film, which is treated with a field control structure ordered; the The above prepared aniline monomer and oligomer solution of experimental example 1 was homogeneously coated onto a PET film surface by using a combination fields effect with a 2 ampere of electrical field, 3000 gauss of magnetic field, and a sequential ordered fluid force field, a wet film is about 1.5 [[i m]] <u>um</u>, the solvent was evaporated automatically at the room temperature to form an aniline related film about 0.3 [[i m]] <u>um</u>. Then, an available amount of oxidant solution was coated onto an aniline related film to proceed polymerization to produce the polyaniline film by using a combination fields effect with a 2 ampere of electrical field and 3000 gauss of magnetic field, finally, the polyaniline film was placed in an oven to be baked at 100°C for 10 min. By using a four-point probe measurement instrument equipment to measure the electrical conductivity of this polyaniline film the value is about 2.5 S/cm.

Page 10, delete the heading on line 19, and insert the following heading:

### Example 1

Page 10, replace paragraph 2 (bridging pages 10 and 11), as follows:

This experimental example is that one the substrate surface with a plasma field treatment was coated a polyaniline film, which is treated with a field control structure ordered; a A PET film was treated with 50 watts of microwave oxygen plasma for 5 min., and then the <u>above</u> prepared aniline monomer and oligomer solution of

Amendment dated: November 26, 2004

Reply to OA of: July 29, 2004

experimental example 1 was homogeneously coated onto a PET film surface by using a combination fields effect with a 2 ampere of electrical field, 3000 gauss of magnetic field, and a sequential ordered fluid force field, a wet film is about 1.5 [[î m]] µm, the solvent was evaporated automatically at the room temperature to form an aniline related film about 0.3 [[î m]] µm. Then, an available amount of oxidant solution was coated onto an aniline related film to proceed polymerization to produce the polyaniline film by using a combination fields effect with a 2 ampere of electrical field and 3000 gauss of magnetic field, finally, the polyaniline film was placed in an oven to be baked at 100°C for 10 min. By using a four-point probe measurement instrument equipment to measure the electrical conductivity of this polyaniline film the value is about 100 S/cm.

Page 11, insert the following new paragraph prior to the first full paragraph, beginning on line 13, as follows:

As is evident from Example 1 of the present invention the electrical conductivity of the polyaniline film is about 100 S/cm as compared to the lesser values of the Comparative Examples of about 2 x 10<sup>-2</sup> S/cm to 7.5 S/cm.